

# Coherent, Comprehensive, and Coordinated Approach to Economic Policy

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**DG ECFIN Annual Research Conference**

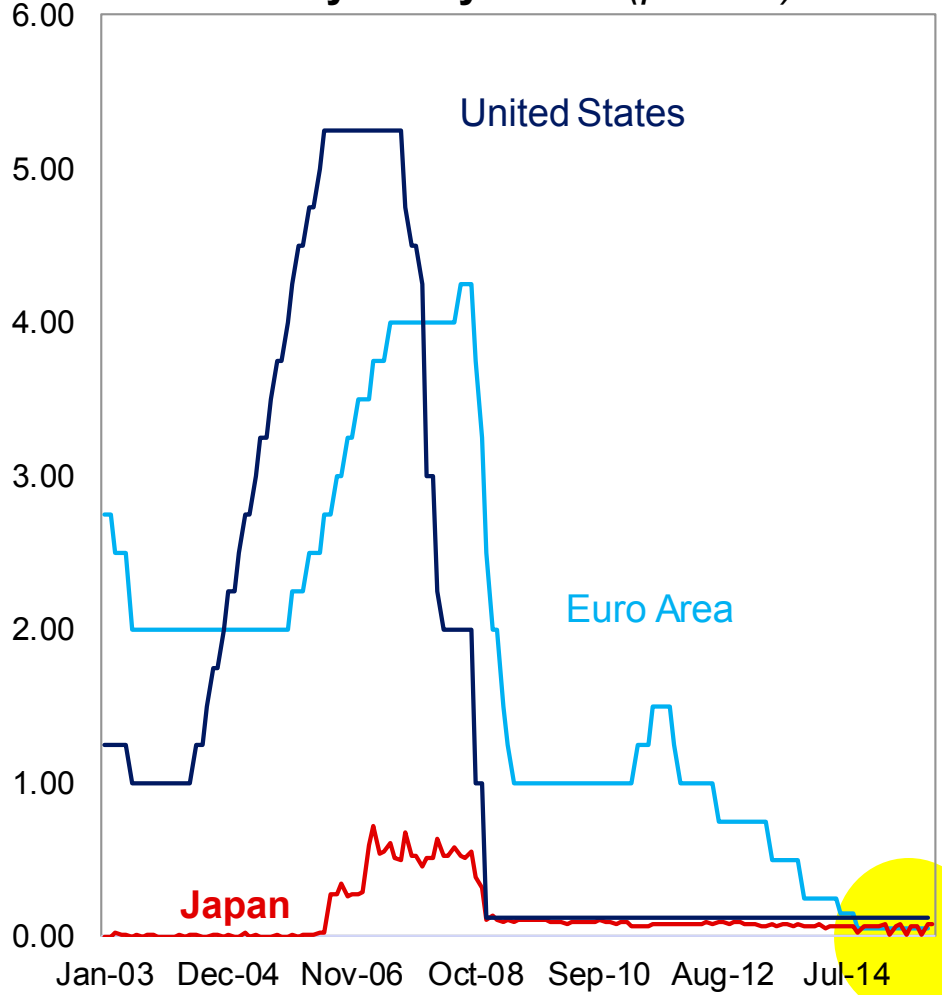
**Brussels, November 23, 2015**

# Motivation

## 2003 ECB Evaluation of its Monetary Policy Strategy

*“As regards the risk of deflation for the euro area as a whole, the risk that the monetary authority would have to lower interest rates to zero and then be effectively constrained by the zero lower bound does not seem to be substantial for inflation objectives below but close to 2% per annum.”*

Monetary Policy Rates (percent)



Note: Euro Area policy rate: Main Refinancing Operations Minimum Bid Rate. Japan policy rate: Uncollateralized Overnight Call Rate. United States policy rate: Fed Funds Target Rate.

Source: Haver Analytics. Monthly data. Latest observation October 2015 for the Euro Area and United States, November 2015 for Japan.



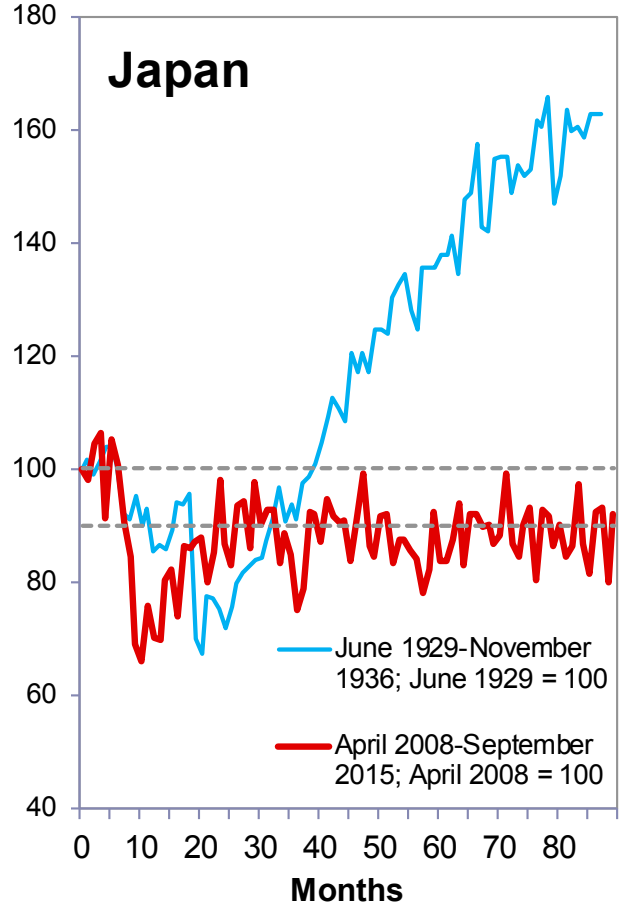
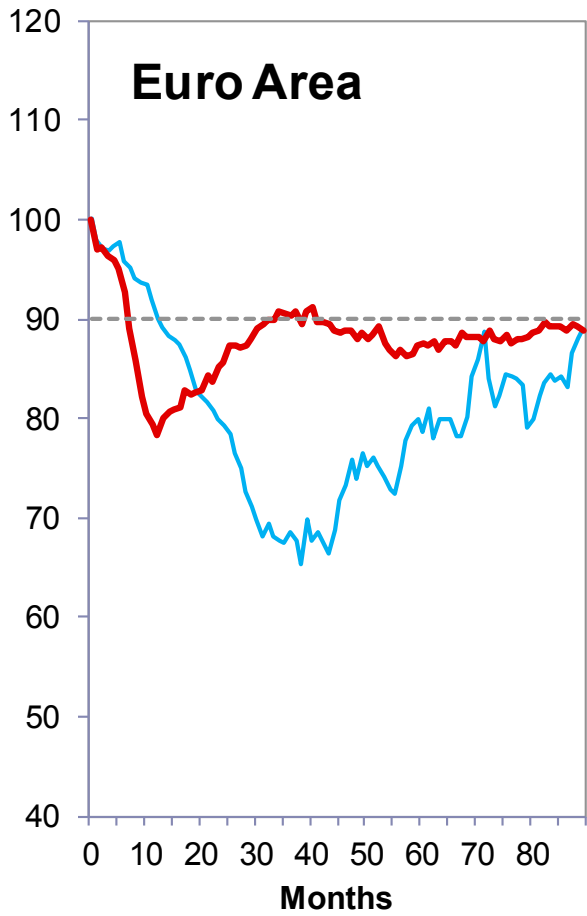
# Outline of the Presentation

- 1. Risks in the Macroeconomic Landscape**
- 2. Shocks and Propagation at the Zero Lower Bound**
- 3. Coherent, Comprehensive, and Coordinated Approach to Economic Policy**
- 4. Japan**
- 5. Conclusion**

# 1. Risks in the Macroeconomic Landscape

# Economic activity: Weak Recovery

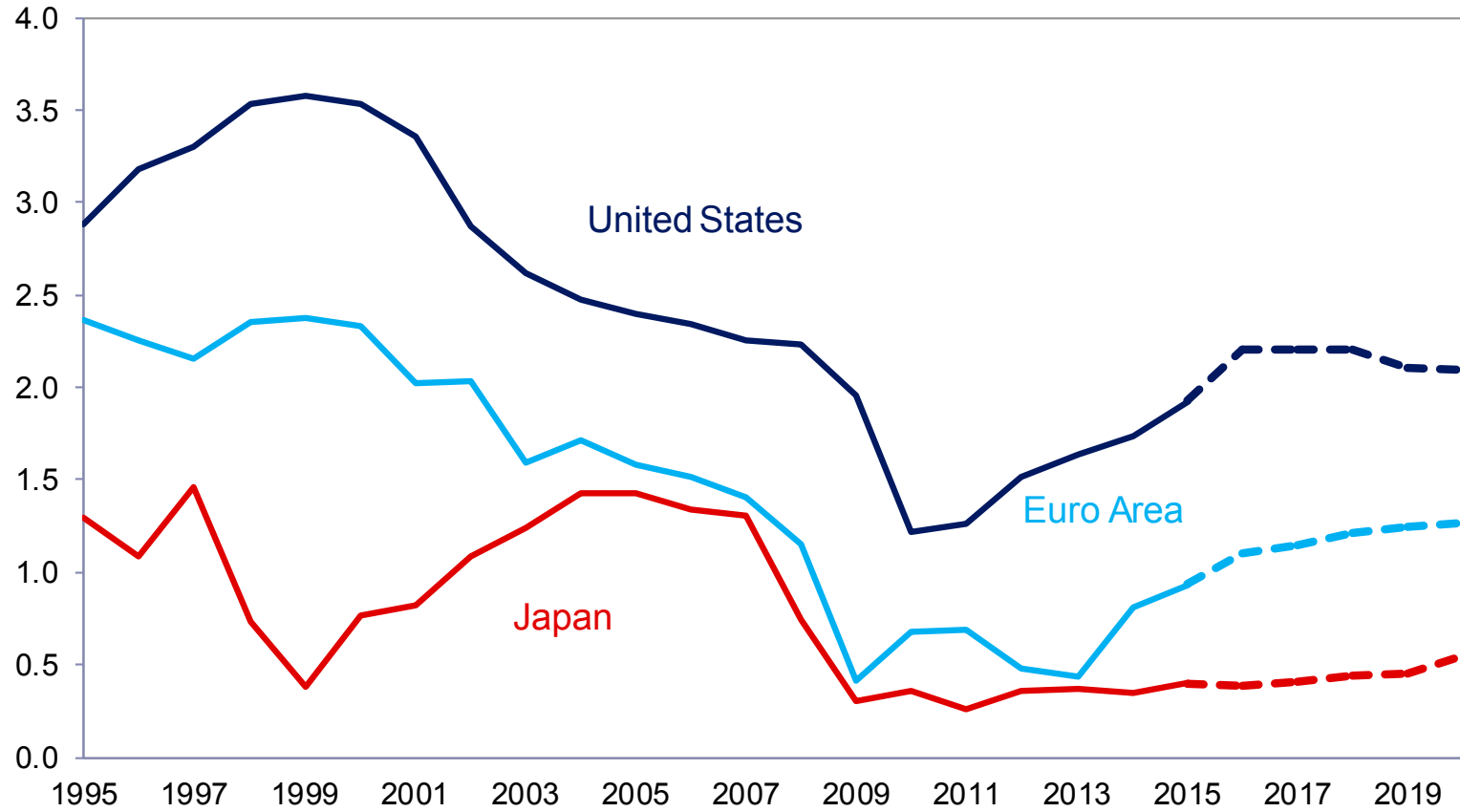
## Industrial production index



Note: For the Euro Area, the 1929 to 1936 series corresponds to the average across France, Germany, and Italy.  
 Source: Eichengreen, B. and K.H. O'Rourke (2010) "What do the new data tell us?" VoxEU.org , 08 March; League of Nations Statistical Yearbooks 1934-38 made digitally available by Northwestern University Library at <http://digital.library.northwestern.edu/league/stat.html> ; Federal Reserve Bank of St. Louis; Haver Analytics and IMF staff estimates. Latest observation September 2015.

# Economic activity: Low growth expectations

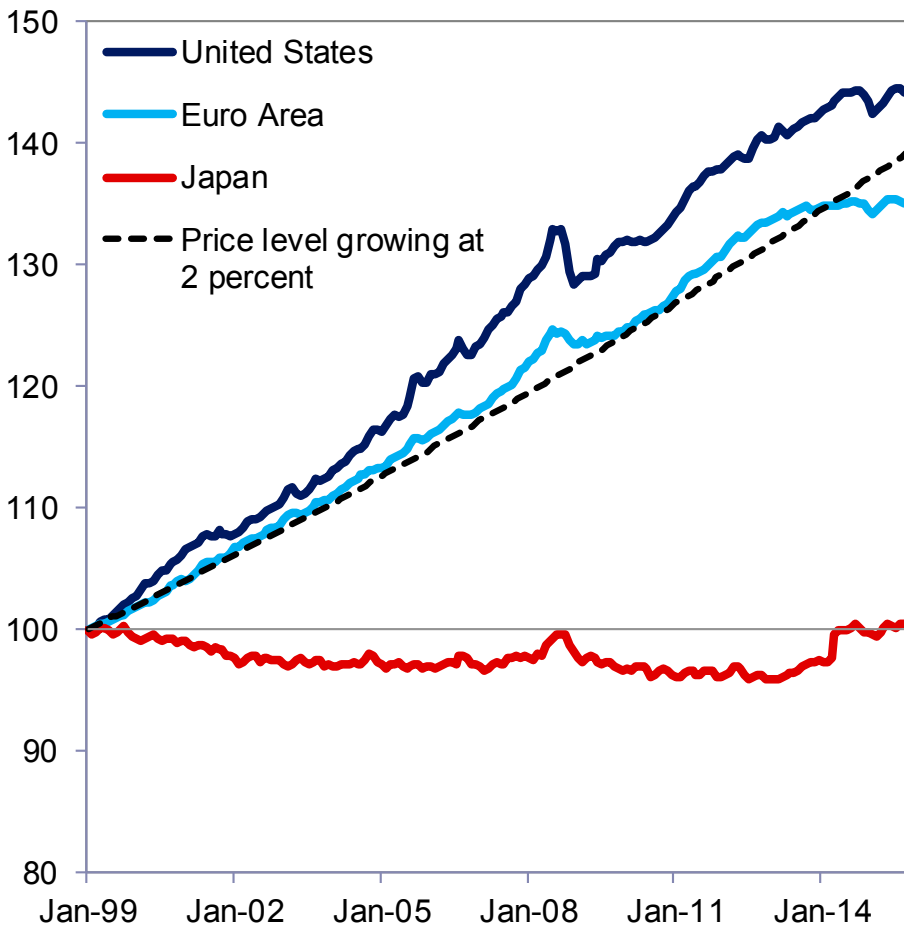
Potential GDP Growth, 1995–2020  
(Percent)



Source: IMF *World Economic Outlook* October 2015.

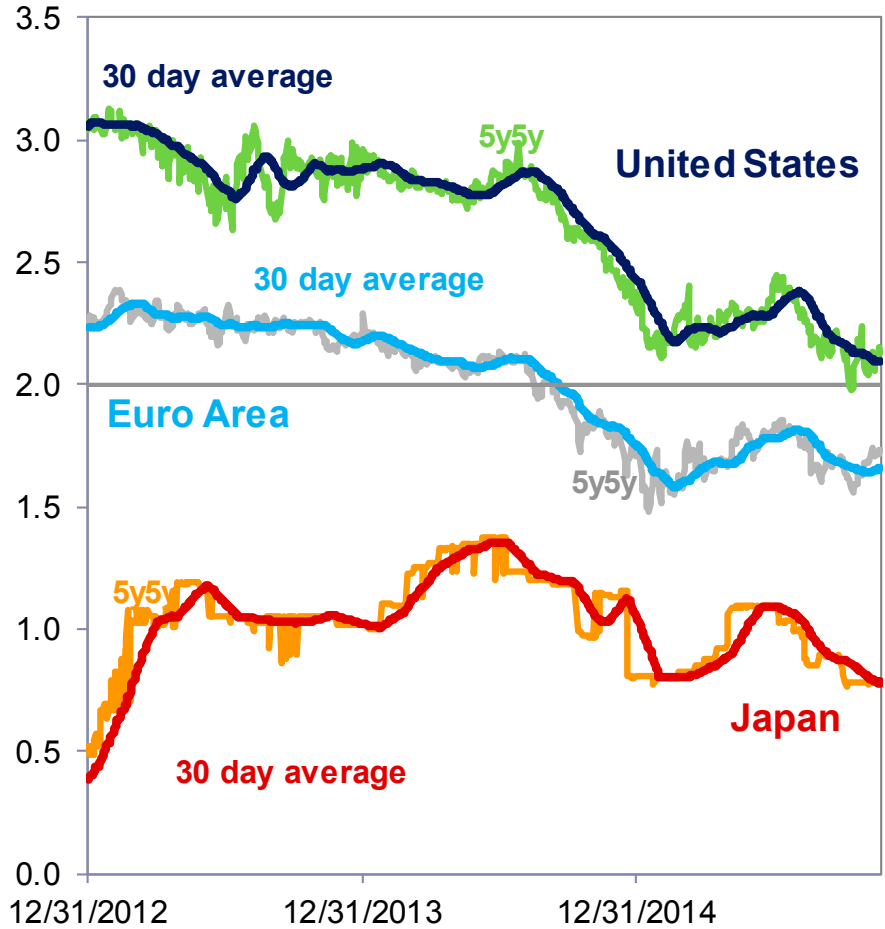
# Inflation dynamics: Low inflation for too long

**Price Level Path, January 1999–October 2015**  
(Index, January 1999=100)



Source: Haver Analytics. Monthly data. Latest observation September 2015 for Japan, October 2015 for the United States and Euro Area.

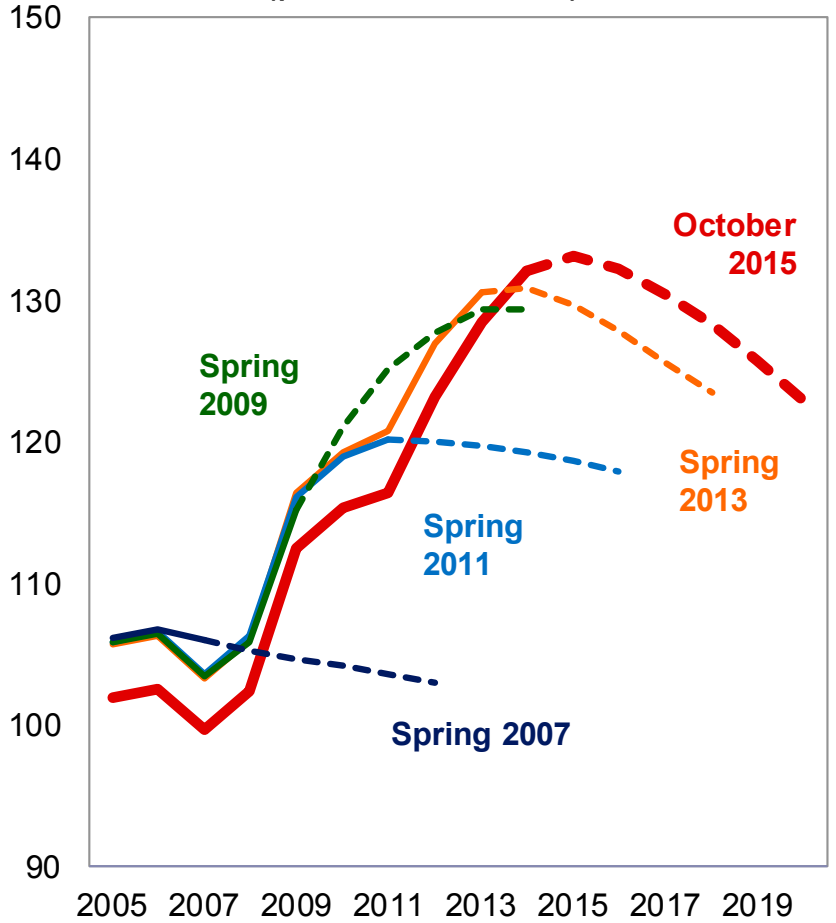
**5y5y Inflation Linked Swap Rate, Daily rates, January 2013 to November 2015 (Percent)**



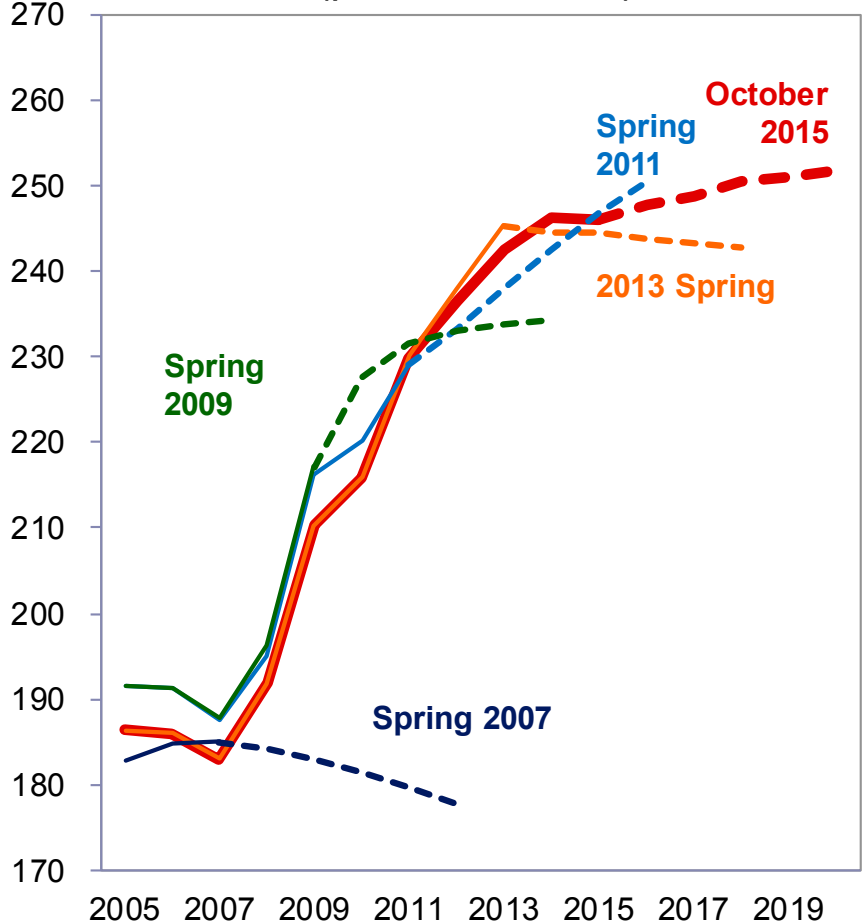
Source: Bloomberg. Latest observation November 20, 2015.

# Low nominal growth is adversely affecting public finances

**Italy: Revisions to General Government Gross Debt, 2005-2020**  
(percent of GDP)



**Japan: Revisions to General Government Gross Debt, 2005-2020**  
(percent of GDP)



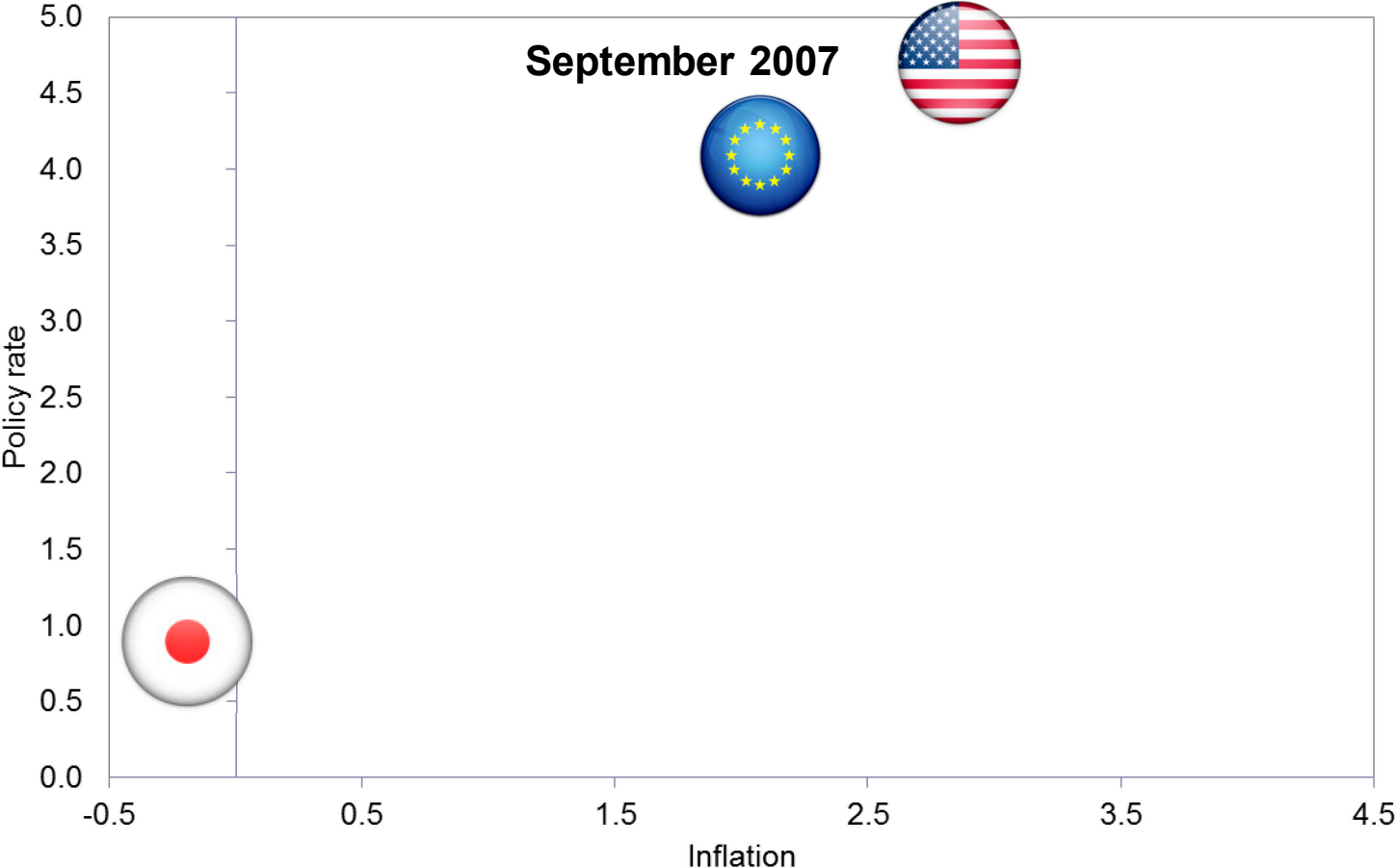
Sources: IMF, *Fiscal Monitor* October 2015 and *World Economic Outlook* October 2015



## 2. Shocks and Propagation at the Zero Lower Bound

# Monetary policy: Zero Lower Bound

**Inflation and Monetary Policy Rates**  
*(Percent)*

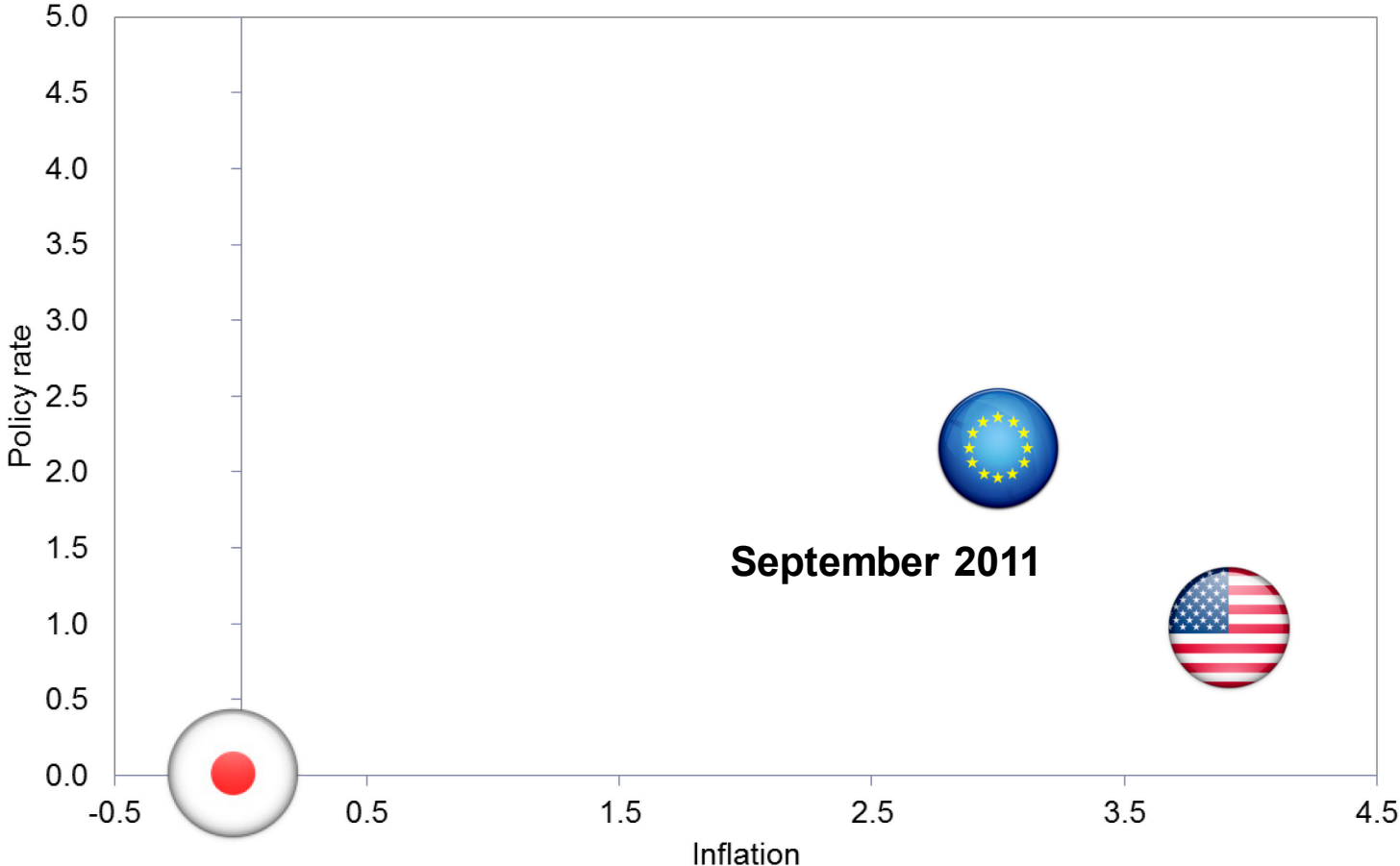


Note: Euro Area policy rate: Main Refinancing Operations Minimum Bid Rate. Japan policy rate: Uncollateralized Overnight Call Rate. United States policy rate: Fed Funds Target Rate.

Source: Haver Analytics and IMF Staff calculation. Latest observation September 2015 or October 2015.

# Monetary policy: Zero Lower Bound

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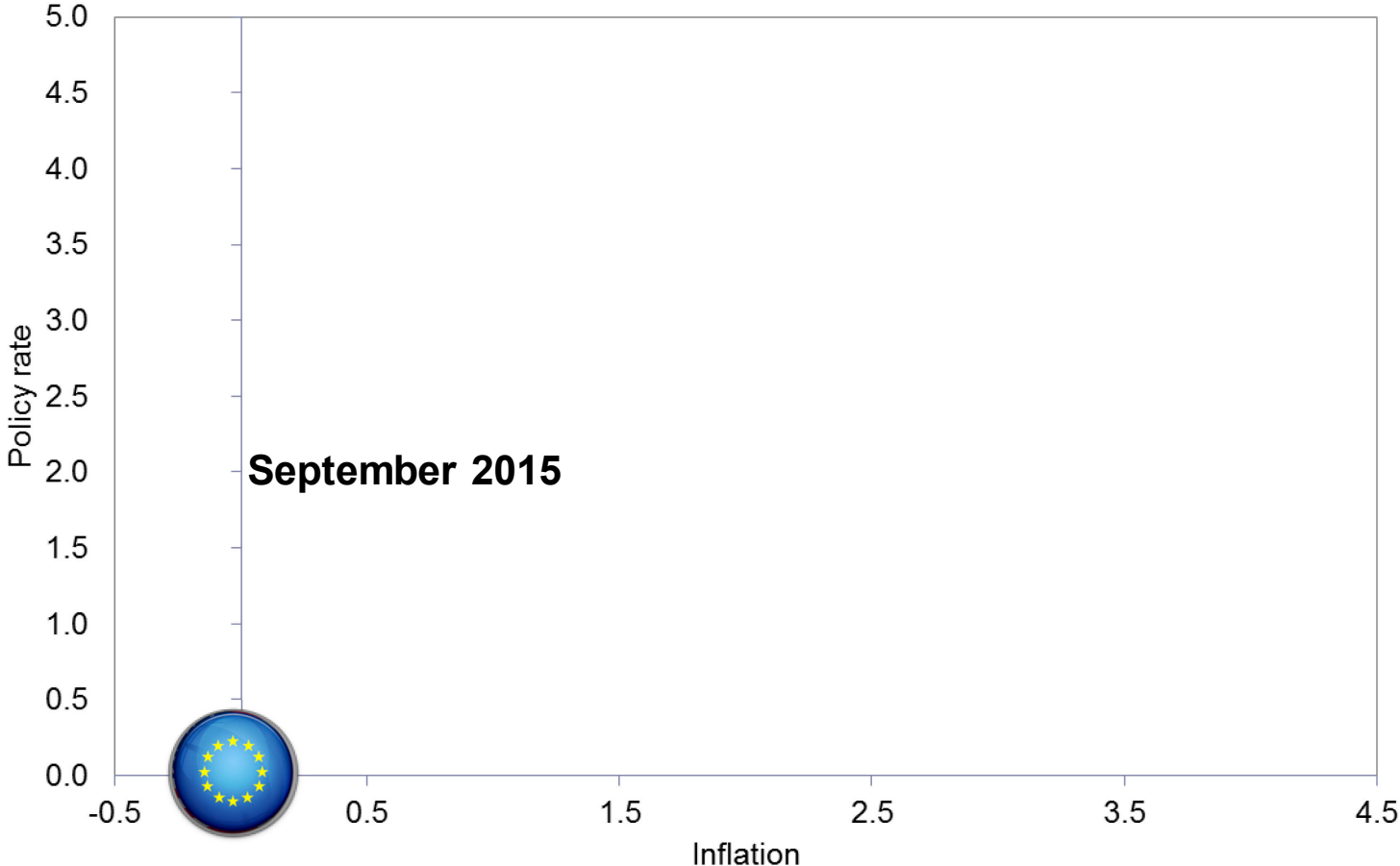


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Source: Haver Analytics and IMF Staff calculation. Latest observation September 2015 or October 2015.

# Monetary policy: Zero Lower Bound

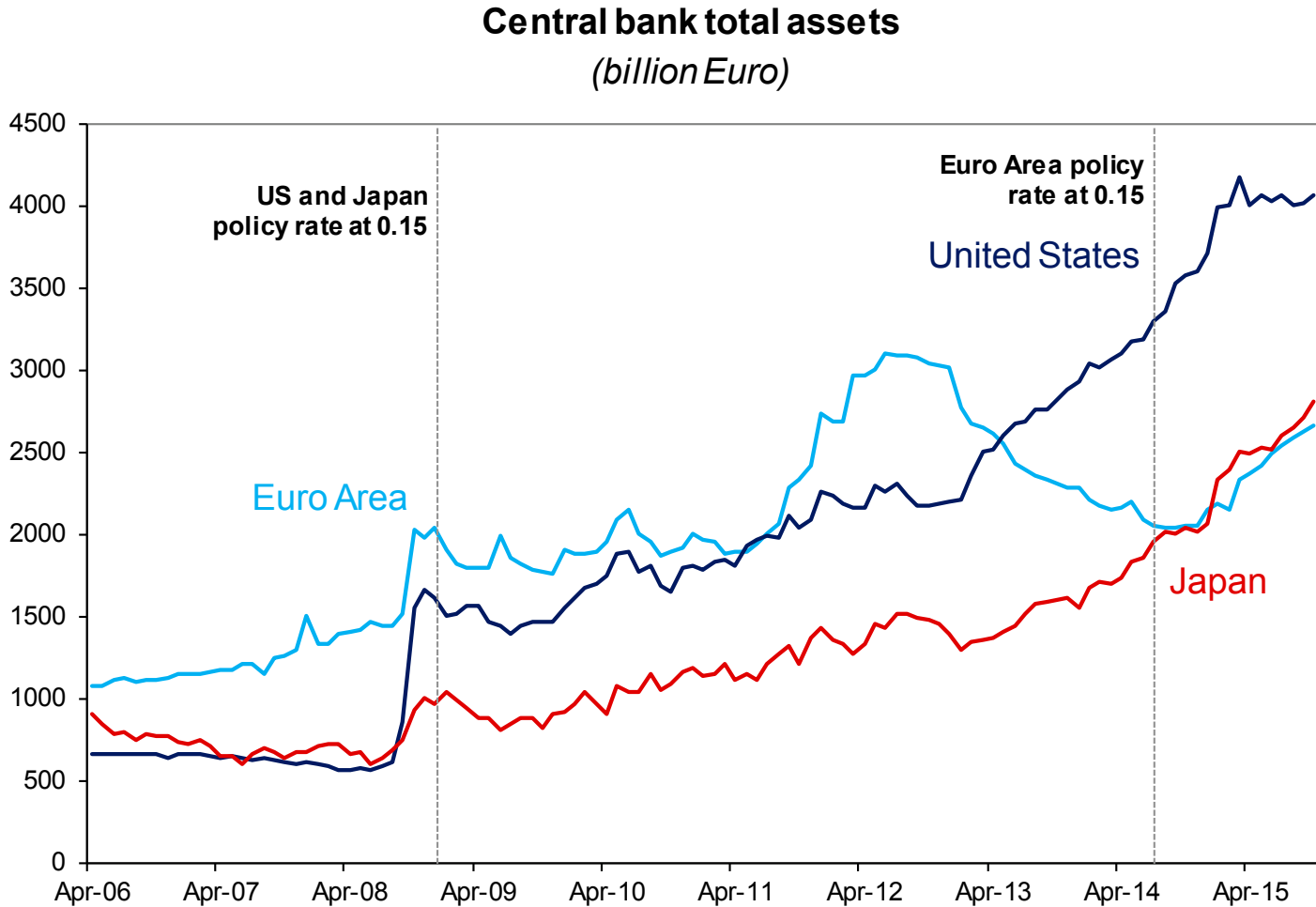
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Source: Haver Analytics and IMF Staff calculation. Latest observation September 2015 or October 2015.

## In normal times, longer-term market interest rates and exchange rates act as shock absorbers

$$\downarrow \sum_{j=0}^k i_{t+j} = [e_{t+k} - \uparrow e_t] + \sum_{j=0}^k \{i_{t+j}^* + \delta_{t+j}\}$$

$$\downarrow \sum_{j=0}^k r_{t+j} = [q_{t+k} - \uparrow q_t] + \sum_{j=0}^k \{r_{t+j}^* + \delta_{t+j}\}$$

q: real exchange rate; e: nominal exchange rate; i: nominal interest rate; r: real interest rate;  $\delta$ : risk premium

# At the ZLB, longer-term market interest rates and exchange rates act as shock amplifiers

$$\uparrow r_t = i_t - \downarrow E_t \pi_{t+1}$$

$$\uparrow \sum_{j=0}^k r_{t+j} = [q_{t+k} - \downarrow q_t] + \sum_{j=0}^k \{r_{t+j}^* + \delta_{t+j}\}$$

$$\downarrow p_t \Rightarrow \downarrow p_{t+k}$$

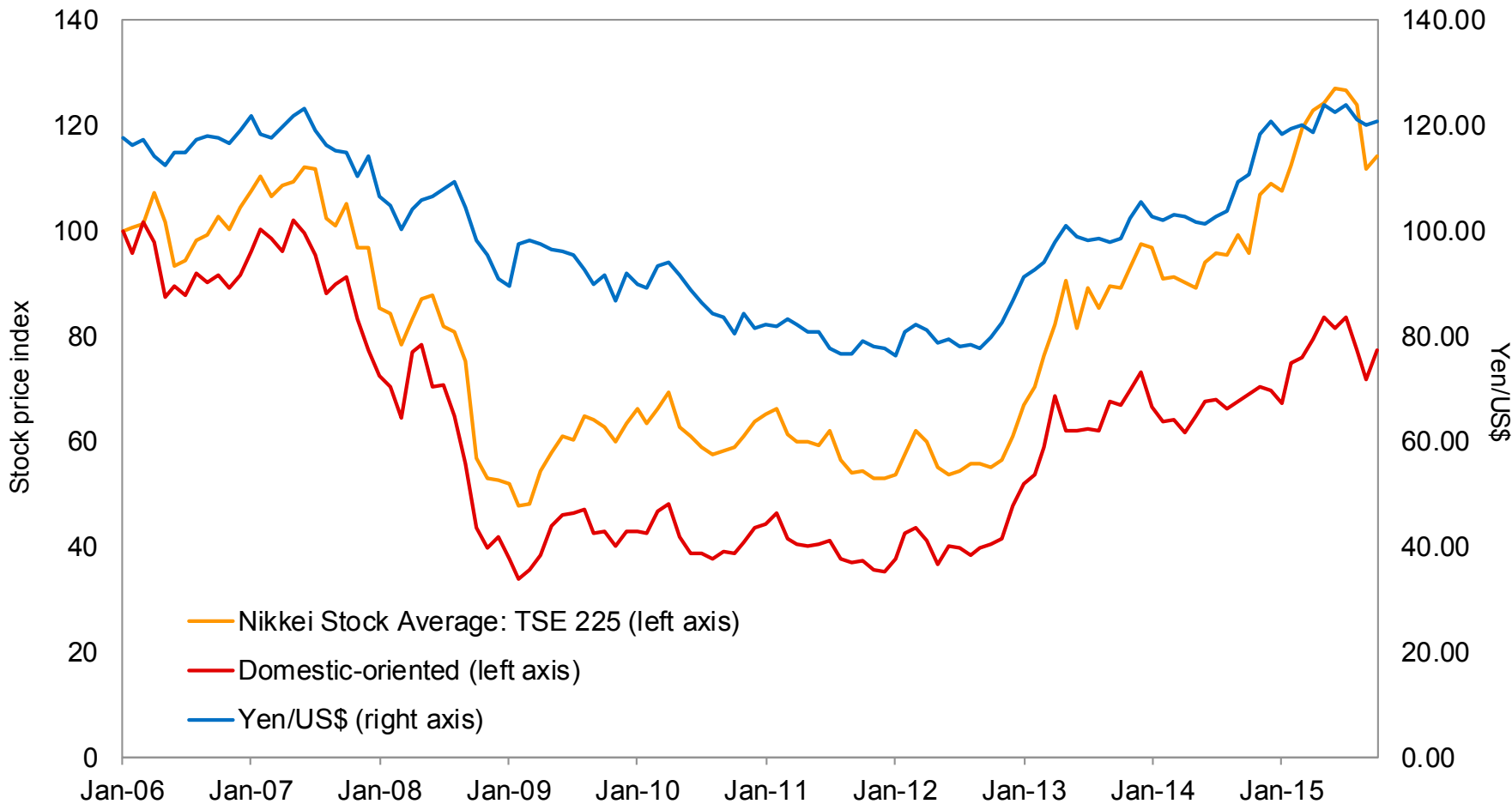
$$q_{t+k} = \downarrow e_{t+k} - \downarrow p_{t+k} + p_{t+k}^*$$

$$\sum_{j=0}^k i_{t+j} = [\downarrow e_{t+k} - \downarrow e_t] + \sum_{j=0}^k \{i_{t+j}^* + \delta_{t+j}\}$$

p: domestic price level; p\*: foreign price level; q: real exchange rate; e: nominal exchange rate; i: nominal interest rate; r: real interest rate; δ: risk premium

# Example of Exchange Rates as Shock Amplifiers: Japanese Yen Appreciates on Bad News (Decline in the Nikkei Index)

Japan: Stock Market Indices and Exchange Rate



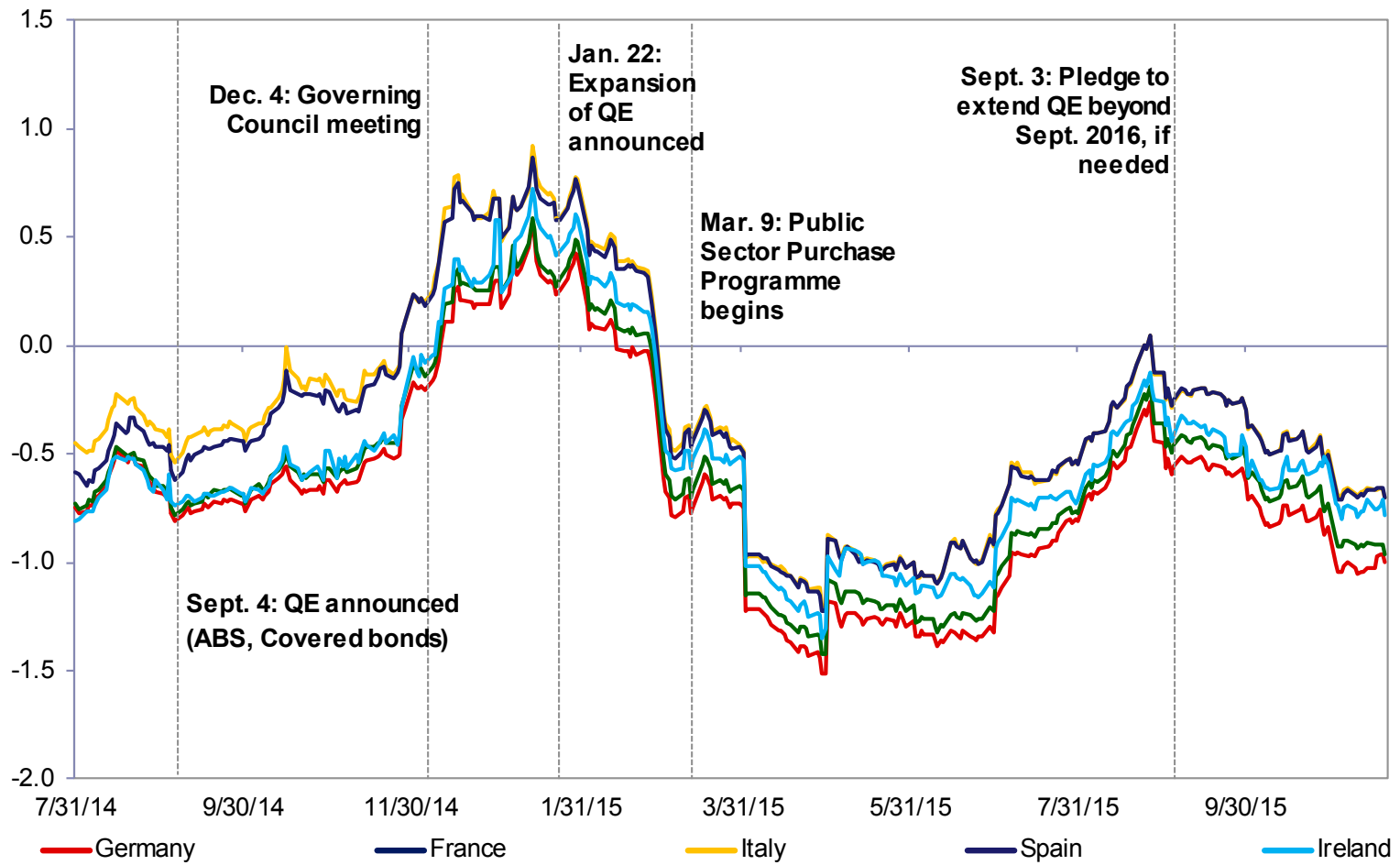
Note: Jan 2006=100; Domestic-oriented stock market index: average of real estate, wholesale trade, retail trade, banks, insurance and services.

Source: Haver Analytics and IMF Staff Calculations. Latest observation October 2015.



# Communication at the ZLB

**Selected Euro Area Countries: Real One-Year Sovereign Bond Yields (percent)**



Source: Bloomberg and IMF Staff calculation. Latest observation November 20, 2015.  
Sovereign bond yield minus inflation swap rate at the corresponding maturity.

### 3. Coherent, Comprehensive, and Coordinated Approach to Economic Policy

# Can the ZLB be removed?

- **Options to remove the ZLB**
  - **Cashless economy (Wicksell 1935, 1936; Woodford, 2003)**
  - **Stamped currency (Keynes, 1936; Goodfriend, 2000)**
  - **Electronic money (Buiter 2009; Agarwal and Kimball, 2015)**

## Challenges associated with UMP and structural reforms

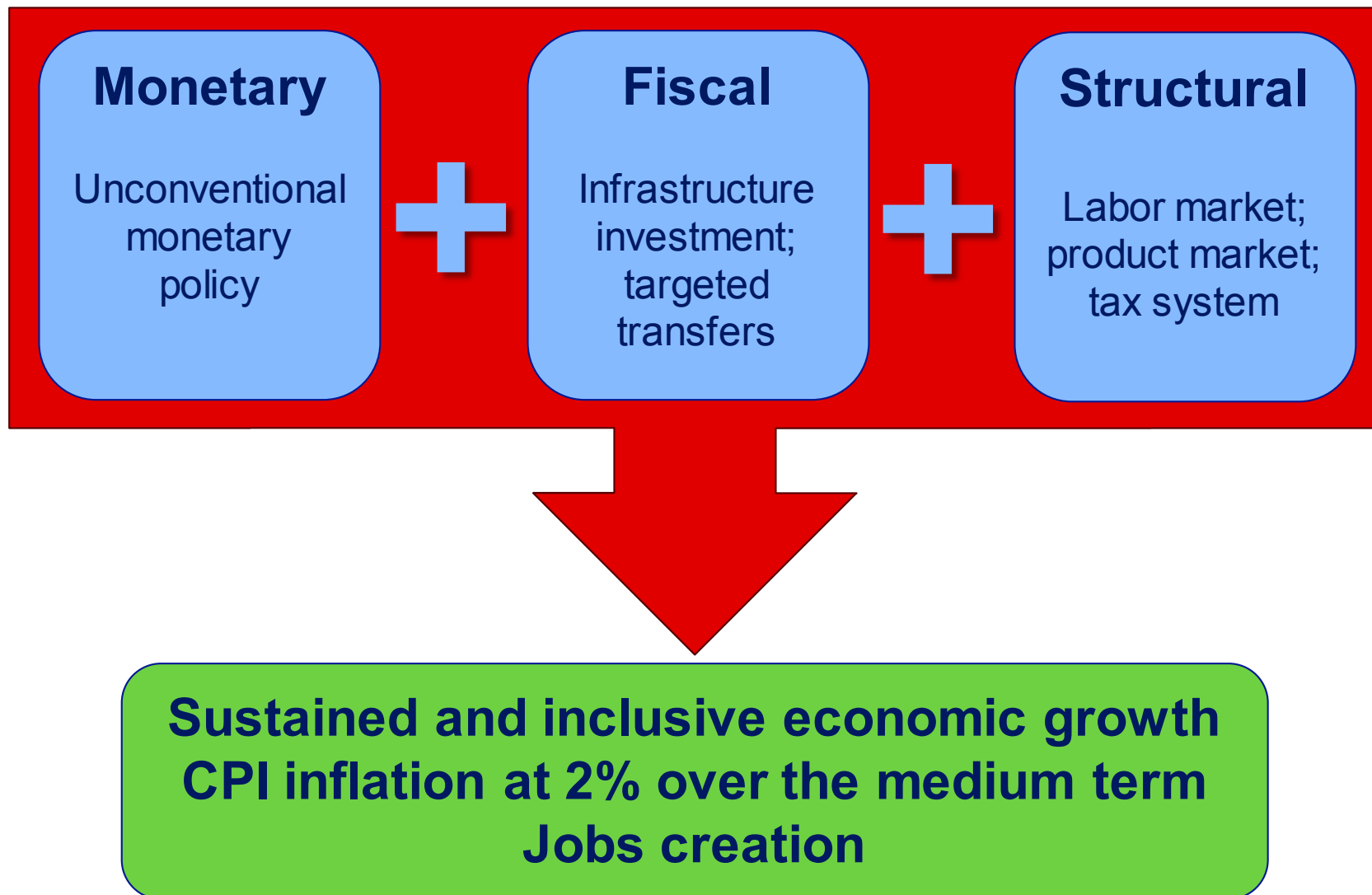
- **With interest rate policy constrained, unconventional monetary policy is followed to achieve price stability**
  - ➔ But the impact of UMP is more uncertain than conventional policy (regarding its effects on broader financial conditions, economic activity, and inflation)
  
- **Structural reforms can improve long-run prospects for employment and output**
  - ➔ But in some cases these have short-term costs (October 2014 Fiscal Monitor)
  - ➔ They are slow to implement, or slow to gain traction
  - ➔ May be deflationary (Eggertsson, 2013)

# Fiscal policy can support monetary and structural policy

In some circumstances, *support from fiscal policy is needed*, and can be especially effective at the ZLB

- ➔ **1. Fiscal policy can serve as a backup to monetary policy**
  - Makes demand management policies credible and effective
  - Larger automatic stabilizers can reduce the likelihood of becoming constrained by the zero lower bound
- ➔ **2. Structural fiscal reforms can make tax and expenditure policies more growth-friendly**
- ➔ **3. Fiscal policy can encourage structural reform**
  - Offsetting potential short term economic costs of reform
  - Mitigating the distributive effects of structural reform
  - Supporting demand to avoid deflationary pressures

# Coherent, Comprehensive, and Coordinated Approach to Economic Policy



## 4. Japan

## Japan: 3-C Approach based on 4 Legs

**Challenges:** Weak growth prospects, vulnerable to deflationary shocks, high public debt, declining population

**Need for a Coherent, Comprehensive, and Coordinated policy package based on 4 legs:**

**1: *Monetary policy framework*** to improve policy effectiveness and support more consistent policy communications

**2: *Fiscal policy framework*** that provides demand support while managing public sector balance sheet risks

**3: *Incomes policy*** to support the monetary policy framework and guard against deflation

**4: *Structural reforms*** to raise potential output.

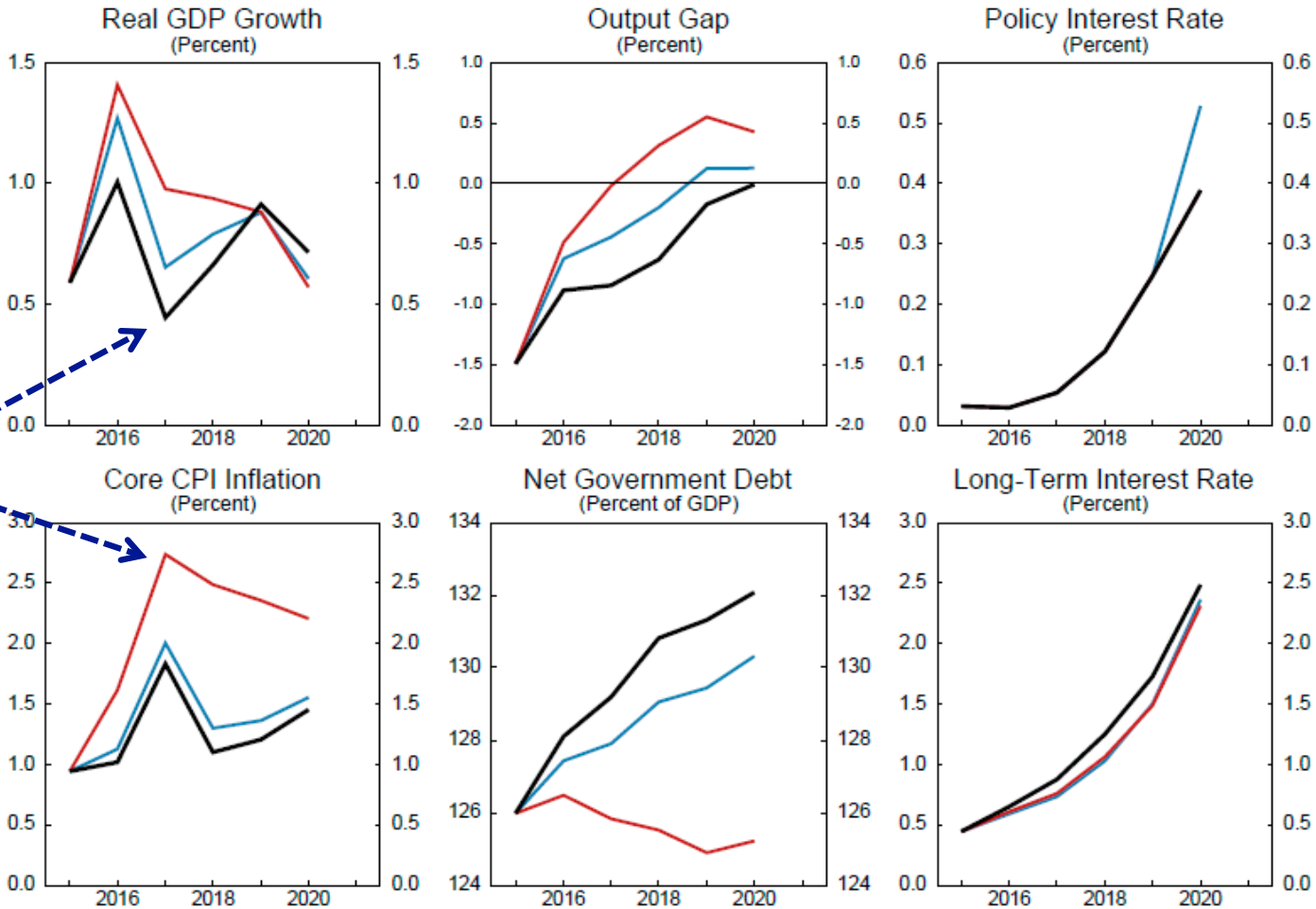


# Japan: Simulations for a 3-C Policy Package

## Japan Quantitative Easing, Fiscal Transfers and Incomes Policy Baseline

Quantitative Easing that is Credible and Effective  
QE in tandem with Fiscal Transfers and Incomes Policy

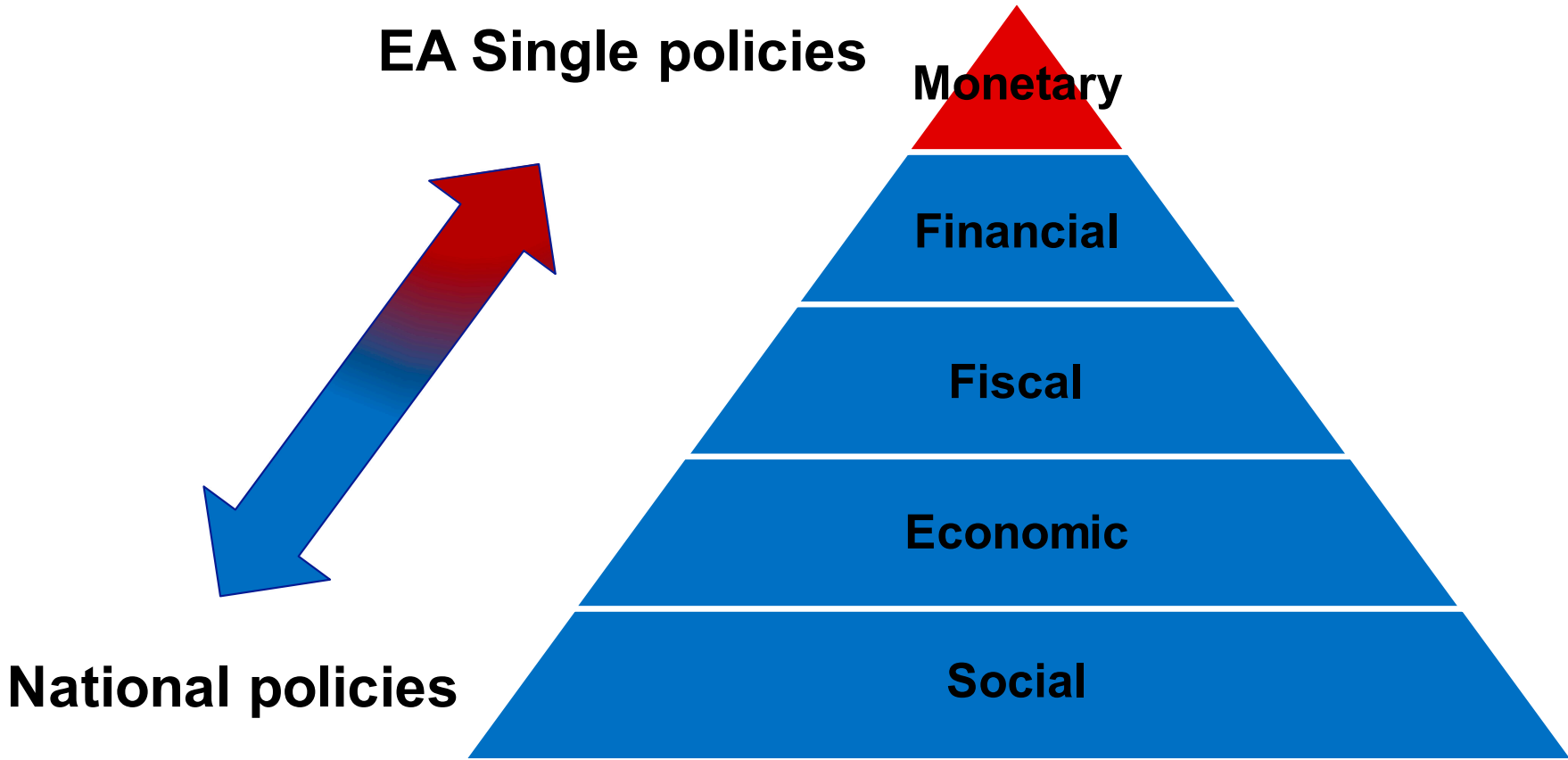
VAT hike  
in 2017  
from 8%  
to 10%



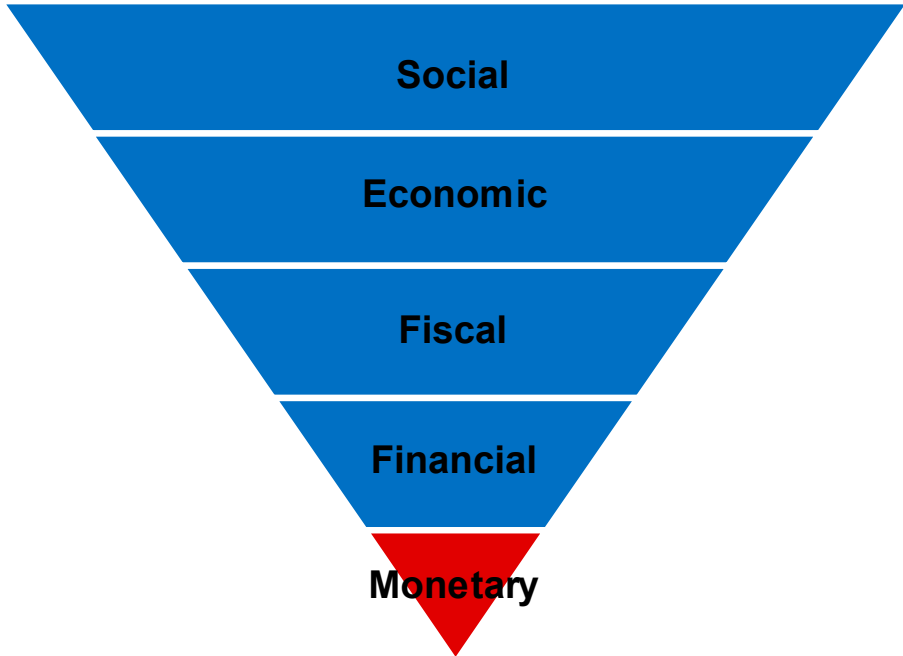
Illustrative simulations based on the Flexible System of Global Models (FSGM) described in IMF Working Paper No. 15/64.

## 5. Conclusion

# Single vs National Policies in the Euro Area



# Monetary policy is overburdened



**Monetary policy is taking on most of the burden to support demand.**

**What fiscal policies can be put in place to support demand and long-run prospects?**

**What are the minimum fiscal requirements for sustainability of the euro area?**

**What should be the priorities?**

# Conclusion

- **Macroeconomic stabilization policies need to be accompanied with structural policies to improve competitiveness and increase potential growth.**
- **Demand management policies can support the implementation of structural reform policies, by offsetting their potential short term economic costs or mitigating their distributive effects.**

**Thank You!**

# References

- Agarwal, R. and M. Kimball, 2015, “Breaking Through the Zero Lower Bound”, *IMF Working Paper* No. 15/224.
- Andrieu, M., P. Blagovlasov, P. Espinasse, K. Honjo, B. Hunt, M. Kortelainen, R. Lalonde, D. Laxton, E. Mavrouides, D. Muir, S. Mursula, and S. Snudden, 2015, “The Flexible System of Global Models – FSGM”, *IMF Working Paper* No. 15/64.
- Buiter, W. H., 2009, “Negative Nominal Interest Rates: Three Ways to Overcome the Zero Lower Bound”, *NBER Working Paper* No. 15118.
- Eggertsson, G., A. Ferrero, A. Raffer, 2013, “Can Structural Reforms Help Europe?” *International Finance Discussion Papers* Number 1092.
- Keynes, J. M. (1936): *General Theory of Employment, Interest, and Money*, London: Macmillan and Co. Limited.
- Goodfriend, Marvin, 2000, “Overcoming the Zero Bound on Interest Rate Policy,” *Journal of Money, Credit, and Banking*, Vol. 32(4)/2000, S. 1007–1035.
- International Monetary Fund, October 2014, *Fiscal Monitor: Back to work: How Fiscal Policy Can Help*.
- Wicksell, K., 1935, *Lectures on Political Economy*, London: Routledge & Kegan Paul Ltd.
- Wicksell, K., 1936, *Interest and Prices: A Study of Causes Regulating the Value of Money*, London: Macmillan and Co. Limited.
- Woodford, M., 2003, *Interest and Prices; Foundations of a Theory of Monetary Policy*, Princeton University Press, Princeton and Oxford.